## **SOFTWARE REVIEWS**

Alt-HealthWatch. Softline Information, Inc., 20 Summer Street, Stamford, CT 06901; 800/524-7922; www.softlineweb.com. Available as Windows-based CD-ROM (Windows 3.1 or higher, 8 MB RAM, 20 MB available disk space, SVGA monitor, and 4X CD-ROM drive) at \$1,495.00 per year with four quarterly updates; or by subscription through the Internet at \$1,795.00 for two simultaneous users; network pricing available.

Have you noticed lately that your memory is not what it used to be? Do you take ginkgo biloba pills to improve your memory? If you do, you are certainly not alone. Ginkgo biloba is one of the most popular herbal supplements available on the market today. But how do you know whether ginkgo really helps? How does anyone know which of the zillion nutritional supplements and herbal preparations seen on supermarket shelves, advertised on the Internet, or promoted by word of mouth are effective?

Health sciences librarians, with an emerging understanding of evidence-based health care, know better than to rely on anecdotal information. Yet according to Angell and Kassirer, authors of the now infamous New England Journal of Medicine editorial "Alternative Medicine-The Risks of Untested and Unregulated Remedies," "Many advocates of alternative medicine ... believe the scientific method is simply not applicable to their remedies. They rely instead on anecdotes and theories" [1]. So, why are you taking ginkgo? Anecdotal evidence is not sufficient—not if you endorse the rigorous application of the scientific method to the study of clinical medicine. According to Angell and Kassirer, "In less than a century, life expectancy in the United States has increased by three decades, in part because of better sanitation and living standards, but in large part because of advances in medicine realized through rigorous testing" [2].

And thus the dilemma faced by proponents of the now fashionable "integrative health" movement: how to reconcile anecdotal experience with the need for scrupulous and time-consuming clinical evaluations?

Health sciences librarians need to consider how to provide their customers—health care practitioners and, increasingly, health service consumers—with access to the best available information about complementary and alternative medicine (CAM). And given the historically charged relationship between the parties promoting CAM and those vested in the nineteenth and twentienth century traditions of allopathic medicine, that task is not easy.

The truth is, however, that scientific rigor is finding its way into the CAM literature. Articles describing clinical trials of St. John's Wort for mild depression, echinacea's impact on the immune system, and ginkgo's effects on memory can be found in MEDLINE and the Alternative and Allied Medicine database, two of the most frequently consulted online repositories for CAM-related literature. Indeed the National Institutes of Health's Office of Alternative Medicine (OAM) makes a subset of MEDLINE, the OAM Complementary and Alternative Medicine Citation Index, available on the Internet at altmed.od.nih.gov/oam/ resources / cam-ci. This index features over 90,000 bibliographic citations from 1966 through 1997. Because they are secondary sources, these tools do not provide access to full text and therein lies the rub. Obtaining access to full-text CAM literature is difficult. Most academic medical center and hospital libraries have traditionally concentrated their collection dollars on the literature of allopathic medicine and so, even if one finds CAM references, how does one go about finding the full text?

Softline Information's HealthWatch (AHW) database goes a long way toward providing access to this elusive body of literature. AHW provides full-text access (as of June 1998) to over 30,000 CAM-related documents and represents a fairly comprehensive picture of CAM-related interventions and concerns. Coverage dates from 1978 and the database is updated quarterly. Contents are drawn from international sources and include full-text items drawn from journals, newsletters, conference proceedings, books, book chapters, and reports among other sources. Images are included with the text, incorporated intact and not reduced. A proprietary non-MeSH indexing system is used. The interfaces to both the CD-ROM version and the Web version are similar. This review will address the Web version only, although nearly all the features and functionality found in the Web version are also available on the CD-ROM.

The search interface is quite simple. A "fake frame" field at the left side of the introductory screen provides quick access to action buttons. These include Home, which takes the user directly out of the current search session to Softline's home page; Search, which is the true "home" for conducting an AHW search; Sort, which processes search results; Hits, which navigates forward or back through a list of citations or full text documents; Print/Export, which prints or saves your results to disk; Help, which connects to online assistance; and Exit, which closes the search session.

The search screen interface prompts the user to enter a "Words in Articles" search. The user simply enters a word or phrase and clicks on the Submit Search button. Errors can be erased by clicking the Clear button. A search of the term "aromatherapy" retrieved 352 citations with ten citations displayed per screen.

Search results are sorted in a brief data grid with article title, journal or source publication title, date of publication, and publication type displayed. Publication types include newspaper, peer-reviewed journal, professional journal, magazine, professional newsletter, and consumer newsletter. Users get back to the main search screen by clicking on the Search button. At the brief data display, users can click on an article's title to view the full text or click on the accompanying selection box in the first column on the screen to mark documents for later printing or export-

Full-text documents in AHW are in HTML (not PDF) format. Each document includes a masthead image at the top of the screen that represents the source publication. This image is a hypertext link to information about the source publication including publisher, editor, contact information, subscription details, and brief descriptions of the publication. Following this publication link are the item title, other bibliographic information, item word count, and then the full text and any images.

The Words in Article search field header is itself a hypertext link and clicking it will invoke a Java-based "Dictionary Browser," which allows the user to scan an alphabetic index of all words in the database. A term is selected by clicking on it; multiple terms may be selected by using the control key. Multiple terms are automatically linked with a Boolean OR. The Dictionary Browser is an important tool for constructing searches in AHW.

Advanced search options include searching by words in titles, by subject, by publication name, by publication date, by author or byline, by type of article, and by type of publication. The Dictionary Browser can be invoked for each

type of search so that, for example, an alphabetic listing of just those words that appear in titles is displayed. For subject searching, the Dictionary Browser displays a controlled vocabulary index that begins with "acupressure" and ends with "yoga." The subject terms are quite specific and include a broad array of health topics and interventional concepts, many of which are familiar to MEDLINE searchers, including "ayurveda," "biofeed-back," and "massage." Other terms, however, such as "Bach flower remedies," "myotherapy," and "phytonutrition," will be familiar primarily to CAM aficionados. The specificity of the subject terms augurs well for librarian searchers working on behalf of clients, where the searcher may be personally unfamiliar with the topic at hand but is working with a knowledgeable customer.

For publication name searching, the Dictionary Browser allows users to search the title of any report, pamphlet, booklet, book excerpt, or periodical covered by AHW. Approximately 147 journals are covered by AHW and, at the time of this writing, seventeen of these are peer-reviewed, including Acupuncture in Medicine, Alternative Therapies in Health and Medicine, American Journal of Natural Medicine, British Journal of Phytotherapy, European Journal of Oriental Medicine, Health Values, the popular HerbalGram: The Journal of the American Botanical Council, Homeopathy: The Journal of the British Homeopathic Association, Journal of the Canadian Chiropractic Association, Journal of Manipulative and Physiological Therapeutics, Journal of Naturopathic Medicine, and Nutrition Today. Plans are underway to increase substantially the number of peer-reviewed journals indexed and the publisher is also preparing to accept unpublished, though reviewed, original research materials.

Although publication date searches by year or by day/month/year can be performed, this review-

er was unsuccessful in finding a way to limit a search by a year range. A way to limit searches easily by a range of publication dates is clearly needed.

Searches can be limited by any of fifteen article types. They are: article, biography, book review, case study, column, conference review, editorial, essay, interview, literary, media review, Q and A, recipes/menus, research paper/report, and summary.

The database includes eleven publication formats including association newsletter, book excerpt, booklet/pamphlet, conference proceedings, consumer newsletter, magazine, newspaper, peer-reviewed journal, professional journal, professional newsletter, and research report/paper. Limiting a search to publication types "peerreviewed journal" or "professional journal" or to the article type "research paper/report" may allow the searcher to focus on the "evidence" contained in AHW. For example, a search combining "peerreviewed journal" AND "research paper/report' yielded a total of 616 articles (current as of June 1998). A subsequent search adding "aromatherapy" OR "aromatherapy (essential oils)" to this set of 616 hits resulted in zero hits. Opening the search up by searching the two aromatherapy subject terms with the perhaps less rigorous publication type "professional journal" and the article type "research paper/report' resulted in five hits. Curiously, most were about evening primrose oil and all came from the same journal, Quarterly Review of Natural Medicine. These examples may, perhaps, be indicative of the amount of "scientifically rigorous content" in AHW. Not all customers will necessarily demand the most rigorous evidence; many customers will be more than satisfied with case studies, conference proceedings, media reviews, and other article types. Furthermore, having full-text access to the more ephem-

eral formats such as professional and consumer newsletters adds to the attraction of this resource. Fulltext access to the peer-reviewed journals and professional journal materials in this database, however, will be the real draw for health sciences librarians looking to provide their customers with access to this rapidly growing body of health literature. A search combining the publication types "peer review journals," or "professional journal," or "research paper/report" resulted in 6,577 full text documents as of June 1998-a not insubstantial data set.

Like other search interfaces designed for the non-librarian end user, the AHW interface will disappoint experienced searchers, especially those used to the hierarchical structure and precision of MEDLINE when accessed through Ovid, Dialog, or other sophisticated search engines. AHW searches produce no sets or search histories to reference and "professional level" searches involving complex, nested search strings are not possible. One can, however, use Boolean AND, OR, and NOT combinations of text and numeric strings in both the Words in Articles and Words in Titles dialog boxes. It is important to recognize that this database is marketed to the broadest possible constituency interested in CAM literature, including not only end user clinical practitioners and librarians, but also patients and the interested public.

Librarians might also object to AHW's quarterly update cycle. According to the publisher, the logistics and economics of providing access to full-text content makes more frequent updates unfeasible. Looking to capture maximum revenue stream for their products, most publishers will seldom sacrifice early print sales in favor of immediate electronic availability. More frequent updating however, particularly of the Web version, would enhance the credibility of AHW with the biomedical library market.

Alt-HealthWatch is a useful tool, precisely because it strives to bring together and present a disparate body of complementary and alternative medicine full text resources. Gingko-takers as well as gingko critics will find the search interface a breeze to maneuver through, and librarians, who can be a demanding lot when it comes to search interfaces, will appreciate the easy access to a myriad of full-text resources that would otherwise be difficult to track down and obtain.

## References

1. ANGELL M, KASSIRER JP. Alternative medicine—the risks of untested and unregulated remedies. N Engl J Med 1998 Sep 17;339(12):839-41.

2. IBID., 840.

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Essentials of Immunology. Reese, Andy C. and Dolen, William K. 1998. ISBN: 1-885966-71-7. Gold Standard Multimedia Inc., PO Box 18305, Tampa, FL 33679-9817; 800/375-0943; info@gsm.com; www.gsm.com. \$99.00 for an individual license; \$475.00 for an institutional multi-user license for CD-ROM version: Windows or Macintosh. Web access available for subscribers.

Essentials of Immunology is a multimedia educational program directed at both medical students and health professionals. Immunology is a complex subject that is advancing continuously, so alternative approaches to learning and knowledge updates are useful.

The program presents the "essential" information needed to understand the subject rather than attempting to provide comprehensive coverage. It covers the basic mechanisms of host defenses, such as complement, antibody-antigen reactions, and cellular response, and the immunologic processes related to specific diseases and medical conditions, such as cancer, transplantation, and allergy. It is also intended to assist medical students studying for the United States Medical Licensing Exam (USMLE) Step 1. For physicians and nurses, the program can be used to earn 1.8 continuing education units (with an anticipated instructional time of eighteen hours).

Essentials of Immunology's primary arrangement is by chapter and its fifteen chapters comprise the largest segment of the program. Each chapter begins with an outline that includes a brief summary of the chapter's highlights. Links from the outline lead to in-depth explanations within the chapter. Users may choose either to study specific areas of interest or to go through the entire chapter from introduction to summary. Each chapter includes colorful diagrams and animations that help depict the information presented.

The program also includes case history and quiz sections. The case history provides a clinical framework in which to study immunology. After the case presentation, the program provides three general questions to think about as the patient is evaluated for the possibility of an immunodeficiency disease and provides suggestions on taking a history, doing a physical examination, and ordering laboratory tests to work up the case. The case history also includes a list of immunodeficiency diseases adapted from a 1995 World Health Organization report [1]. For most of the diseases, there are concise descriptions that include information on pathogenesis, molecular immunology, clinical features, laboratory findings, management, and selected references. For some diseases, the program links to the chapter in-